

Digital Equipment Corporation
Maynard, Massachusetts

digital

PDP-15 Systems

TC15 DECtape Control Maintenance Manual Volume 2

**PDP-15 SYSTEMS
TC15
DECTAPE CONTROL
MAINTENANCE MANUAL
VOLUME 2**

DIGITAL EQUIPMENT CORPORATION • MAYNARD, MASSACHUSETTS

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DEC	PDP
FLIP CHIP	FOCAL
DIGITAL	COMPUTER LAB

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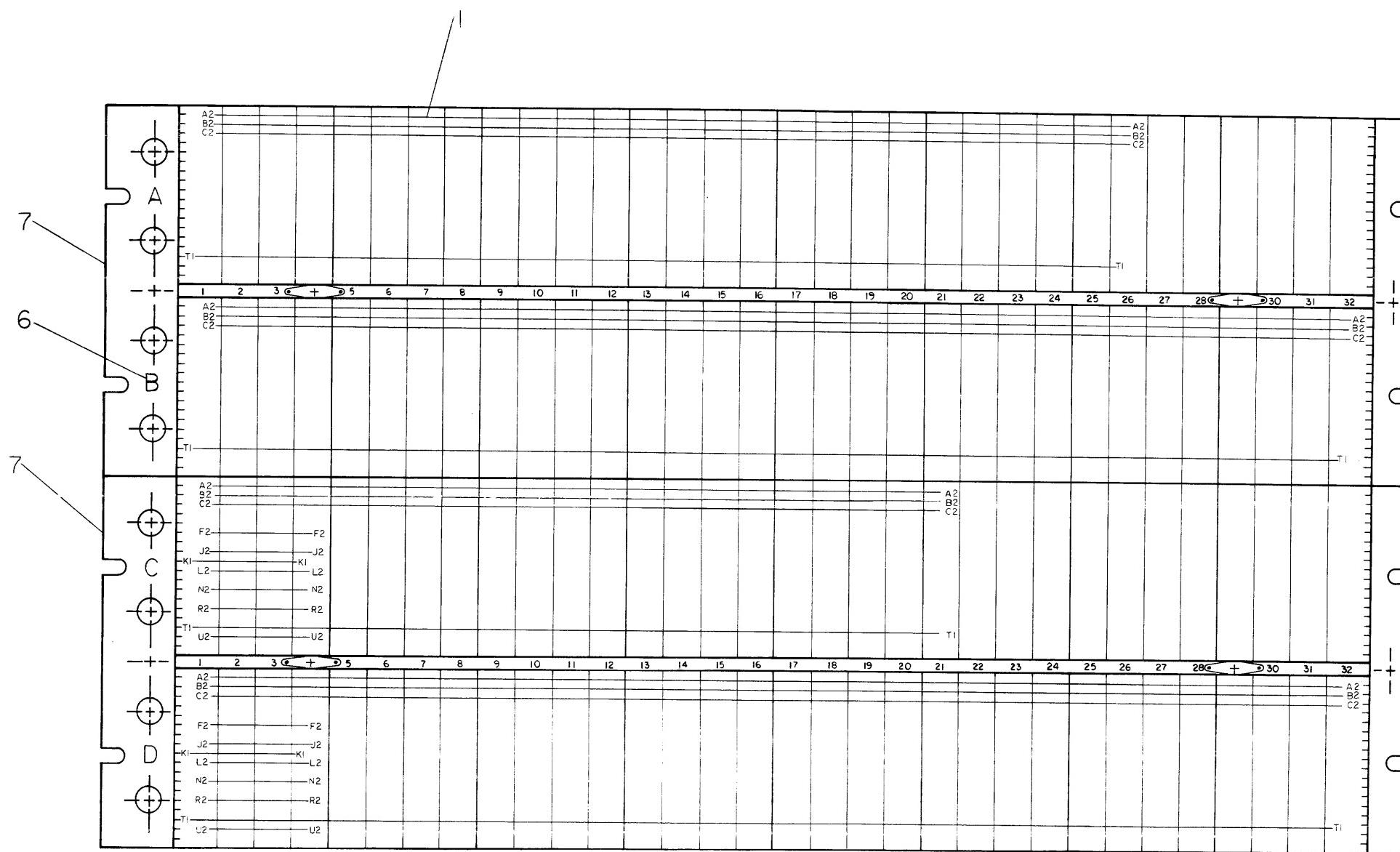
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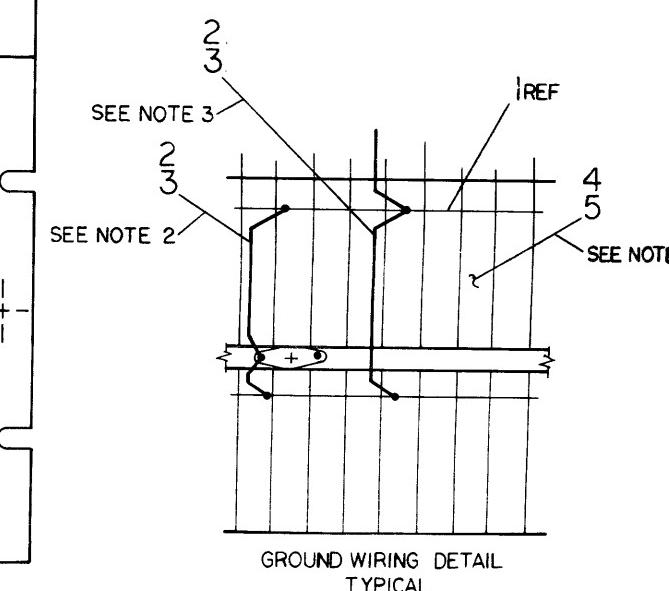
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1



NOTES:

1. CONNECTIONS ON ITEM NUMBER 1 & 2 TO BE LOCATED AND SOLDERED AT MINIMUM PRACTICAL HEIGHT ABOVE BLOCKS.
2. ALL CONNECTOR BLOCKS TO BE GROUNDED TO GROUND LUGS AS SHOWN, 4 PLACES
3. JUMPER GROUND BUSSING AS SHOWN, 8 PLACES.
4. USE YELLOW WIRE (ITEM #4) FOR MACHINE WRAPPED AND BLUE WIRE (ITEM #5) FOR HAND WRAPPED WIRING.



GROUND WIRING DETAIL
TYPICAL

REVISIONS	
CHG.	REV.
2-8	A
T15-000001	
LAZUKA	7-2-70
	2-6-70

DEC FORM NO. 117

8

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
TC15					
PARTS LIST					
DO NOT SCALE DRAWING	DRN	DATE	EQUIPMENT CORPORATION		
UNLESS OTHERWISE SPECIFIED	11/1/70	DATE	digital		
DIMENSION IN INCHES	CARD	DATE	AYNARD, MASSACHUSETTS		
TOLERANCES	2-3-70	DATE			
DECIMALS = .005 ± 1/64 = 0.30	ZNG	DATE			
FINAL SURFACE QUALITY	PROJ. ENG.	DATE			
REMOVE BURRS AND BREAK SHARP CORNERS	PROD.	DATE			
MATERIAL	QB-14	DATE			
	NEXT HIGHER ASSY				
	C-AD-7006666-0-0				
FINISH	SCALE NONE		SIZE CODE	NUMBER	REV.
			D	AD7006701-0-0	A
	SHEET 1 OF 1		DIST.		

WIRED ASS'Y
(TC15)

8

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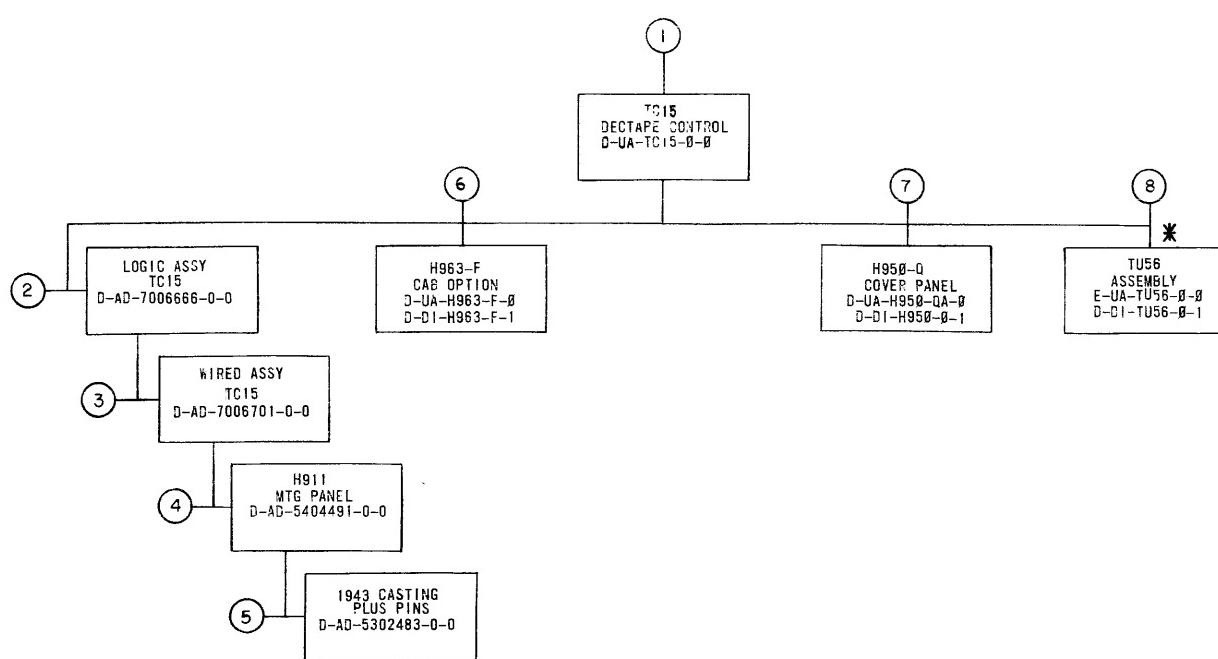
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1

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* ASTERISK INDICATES OPTION

REVISIONS		CHANGE NO.	REV.
CHK	1	TC15-0001	A
	2	TC15-0002	B
	3	TC15-0003	C
	4	TC15-0004	D
	5	TC15-0005	E
	6	TC15-0006	F
	7	TC15-0007	G
	8	TC15-0008	H
	9	TC15-0009	I
	10	TC15-0010	J
	11	TC15-0011	K
	12	TC15-0012	L
	13	TC15-0013	M
	14	TC15-0014	N
	15	TC15-0015	O
	16	TC15-0016	P
	17	TC15-0017	Q
	18	TC15-0018	R
	19	TC15-0019	S
	20	TC15-0020	T
	21	TC15-0021	U
	22	TC15-0022	V
	23	TC15-0023	W
	24	TC15-0024	X
	25	TC15-0025	Y
	26	TC15-0026	Z

MECHANICAL			DEPT USAGE			ELECTRICAL			DEPT USAGE		
ITEM NO	DESCRIPTION	PART NO.	CUST	PROD	F/C	ITEM NO	DESCRIPTION	PART NO.	CUST	PROD	F/C
1.	TC15 DECTAPE CONTROL TC15 DECTAPE CONTROL (PL) BC01B CABLE ASSY	D-U-A-TC15-0-0 A-PL-TC15-0-0 D-U-A-BC01B-0-0				1.	DECTAPE CONTROL TC15 TC15 SPECIFICATIONS	A-ML-TC15-0-0 A-SP-TC15-0-23			
2.	LOGIC ASSY TC15 LOGIC ASSY TC15 (PL)	D-AD-7006666-0-0 A-PL-7006666-0-0				2.	I/O BUS RECEIVERS I/O CONTROL AND R/W AMPS STATUS REGISTER A TP GEN MARK TRACK DECODE CONTROL ERRORS DB00-B2 DTB00-B2 DB 3-5 DTB 3-5 DB 6-8 DTB 6-8 DB 9-11 DTB 9-11 DB 12-14 DTB 12-14 DB 15-17 DTB 15-17 BUS DRIVERS CABLES	D-BS-TC15-0-02 D-BS-TC15-0-03 D-BS-TC15-0-04 D-BS-TC15-0-05 D-BS-TC15-0-06 D-BS-TC15-0-07 D-BS-TC15-0-08 D-BS-TC15-0-09 D-BS-TC15-0-10 D-BS-TC15-0-11 D-BS-TC15-0-12 D-BS-TC15-0-13 D-BS-TC15-0-14 D-BS-TC15-0-15 D-BS-TC15-0-16			
3.	WIRED ASSY TC15 WIRED ASSY TC15 (PL) LOGIC FRAME DECALS 288 PIN BLOCK	D-AD-7006701-0-0 A-PL-7006701-0-0 A-DC-7106371-0-0 E-SC-1205348-0-0				3.	MODULE UTILIZATION WIRE LIST TC15 AC/DC PWR WIRING TIMING DIAGRAM ACCEPTANCE PROCEDURE MODULE UTILIZATION MODULE UTILIZATION	K-WL-TC15-0-17 K-WL-TC15-0-18 D-IC-TC15-0-19 D-TD-TC15-0-20 A-SP-TC15-0-23 D-MU-TC15-0-17 A-PL-TC15-0-17			
4.	H911 MTG PANEL H911 MTG PANEL (PL)	D-AD-5404491-0-0 A-PL-5404491-0-0				4.					
5.	1943 CASTING PLUS PINS 1943 CASTING PLUS PINS (PL) 1943 FRAME CASTING	D-AD-5302483-0-0 A-PL-5302483-0-0 E-MD-1202885-0-0				5.					
6.	H963-F CAB OPTION H963-F CAB OPTION (PL) DWG INDEX H963-F	D-U-A-H963-F-0 A-PL-H963-F-0 D-DI-H963-F-1				6.					
7.	H950-Q COVER PANEL H950-Q COVER PANEL (PL) DWG INDEX H950	D-U-A-H950-QA-0 A-PL-H950-QA-0 D-DI-H950-Q-1				7.					
8.*	TU56 ASSEMBLY TU56 ASSEMBLY (PL) DWG INDEX TU56	E-U-A-TU56-B-0 A-PL-TU56-B-0 D-DI-TU56-B-1				8.*					

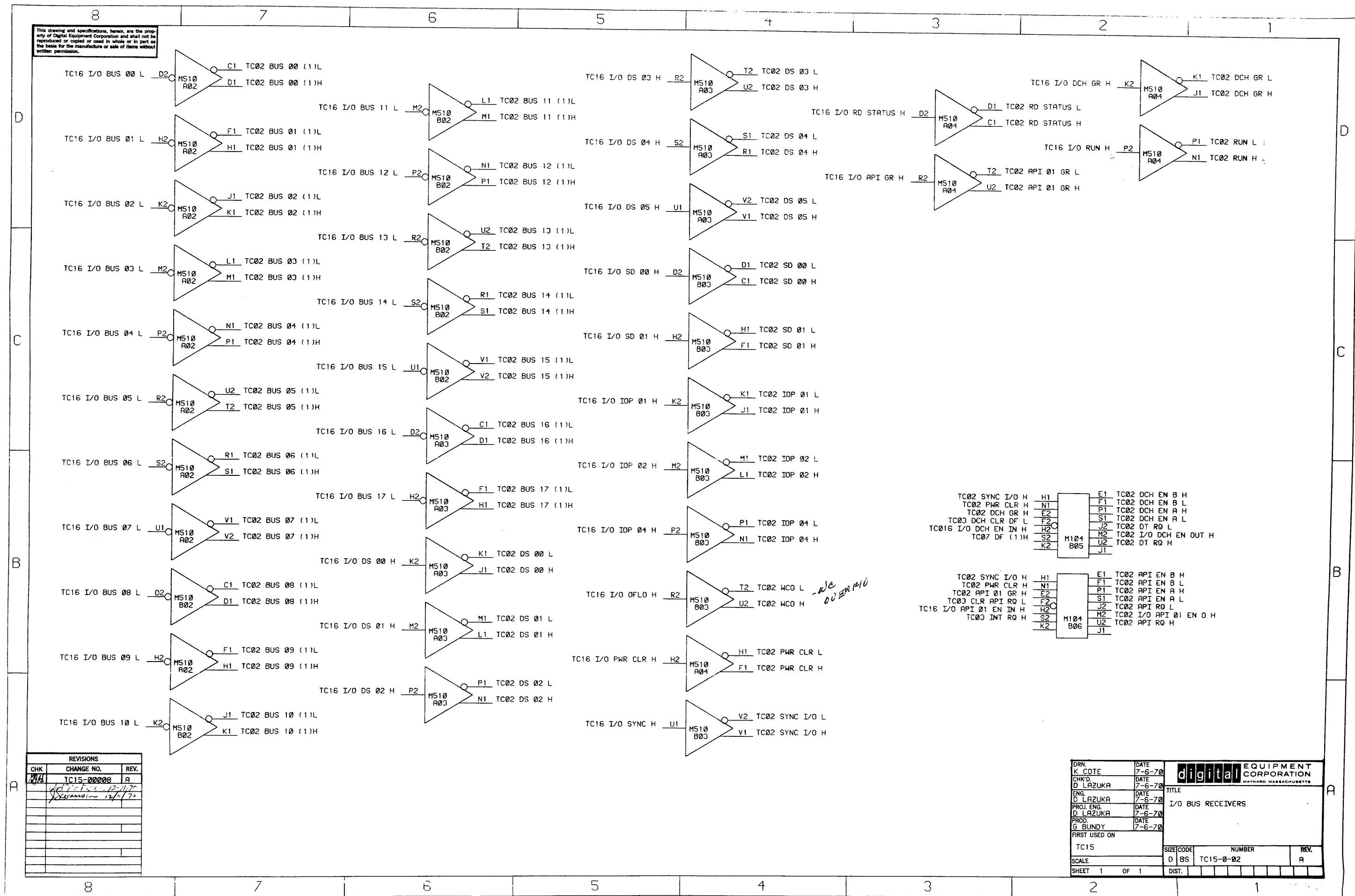
QTY.	DESCRIPTION	PART NO.	ITEM NO.
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<p>FIRST USED ON OPTION / MODEL</p> <p>DO NOT SCALE DRAWING</p> <p>UNLESS OTHERWISE SPECIFIED</p> <p>DIMENSION IN INCHES</p> <p>TOLERANCES</p> <p>DECIMALS FRACTIONS ANGLES</p> <p>$\pm .000$ $\pm 1/64$ $\pm 0^{\circ}30'$</p> <p>FINAL SURFACE QUALITY</p> <p>REMOVE BURRS AND BREAK SHARP CORNERS</p> <p>MATERIAL</p> <p>FINISH</p> <p>SCALE</p> <p>SHEET 1 OF 1</p> <p>DWG INDEX</p> <p>TC15</p>			
DRW	1/8/69	DATE	1/8/69
CHKD	1/8/69	DATE	1/8/69
ENG	1/8/69	DATE	1/8/69
PROJ. ENG	1/8/69	DATE	1/8/69
PROD	1/8/69	DATE	1/8/69
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS			
TITLE			
DWG INDEX			
TC15			
SIZE CODE	DD1	NUMBER	REV.
DD1	TC15-0-1		E
DIST.	G		

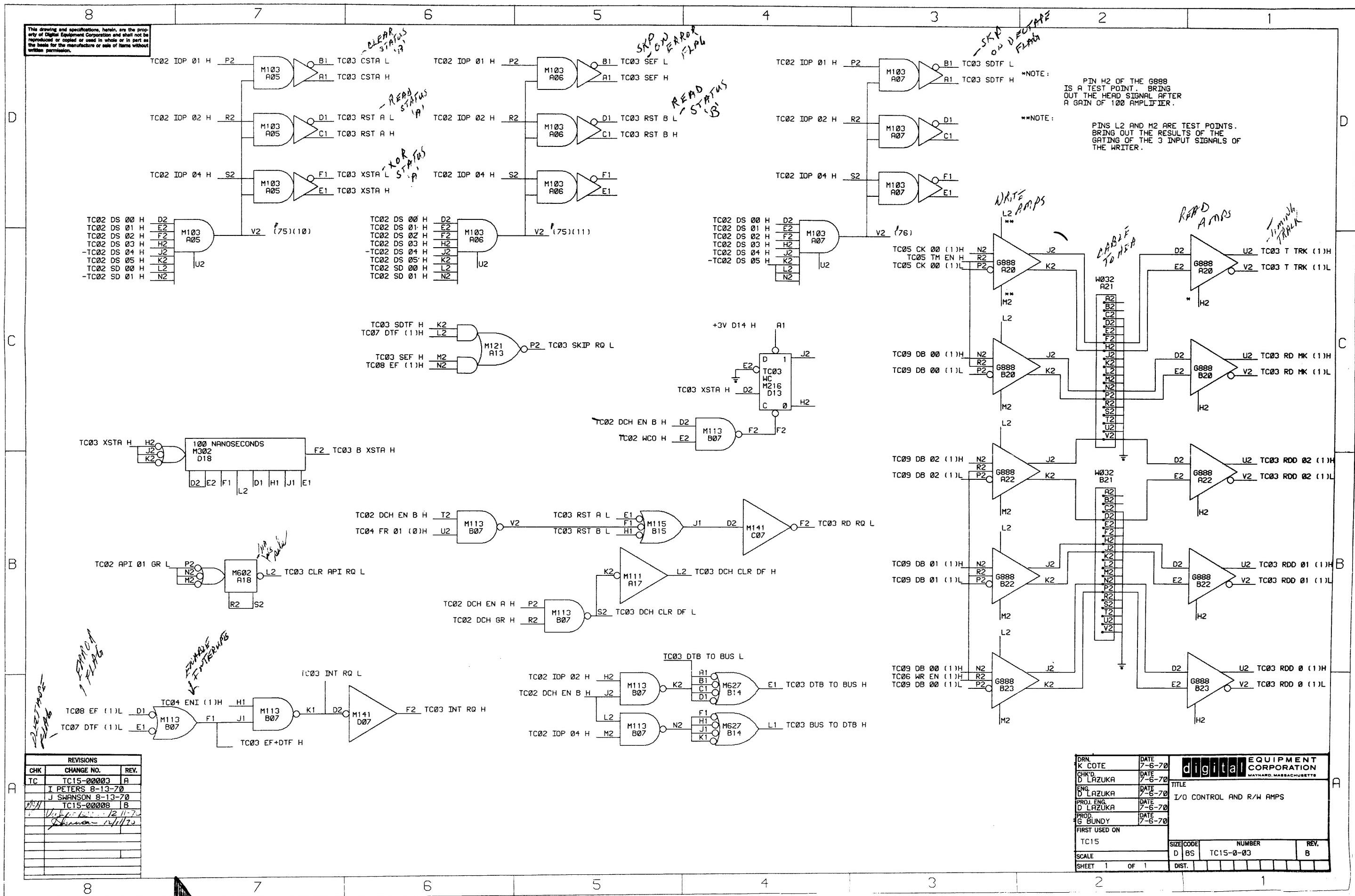
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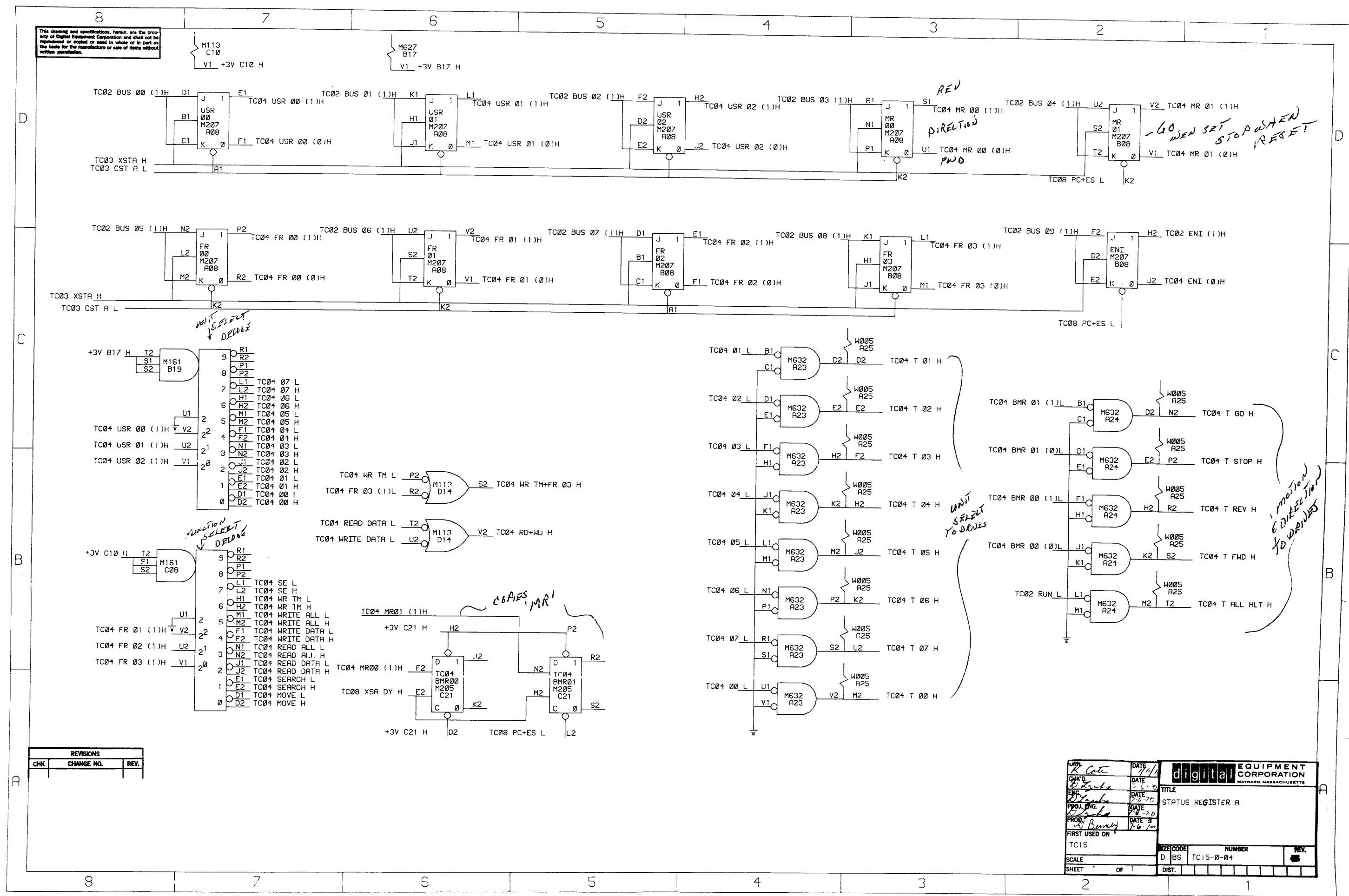
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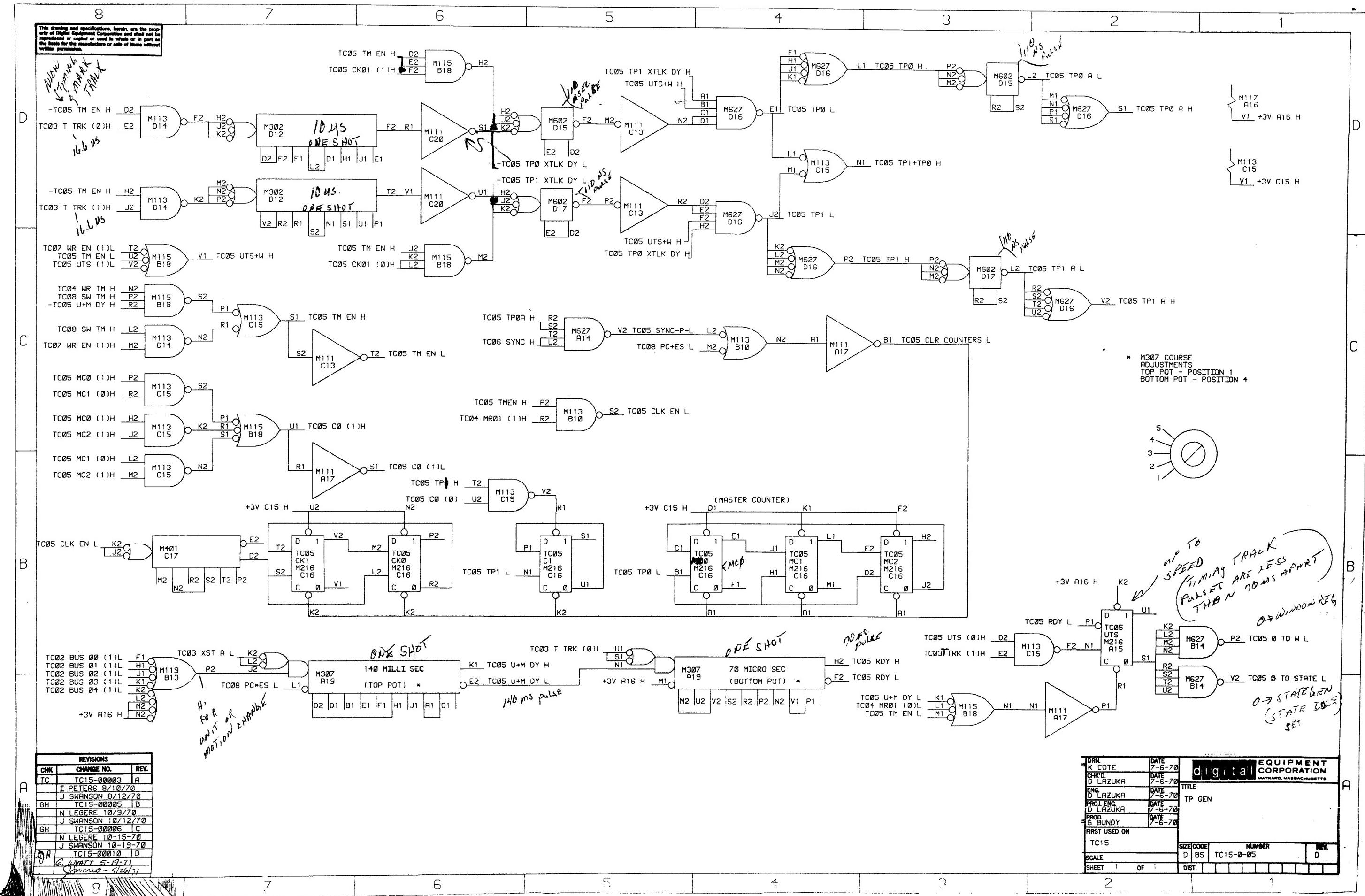
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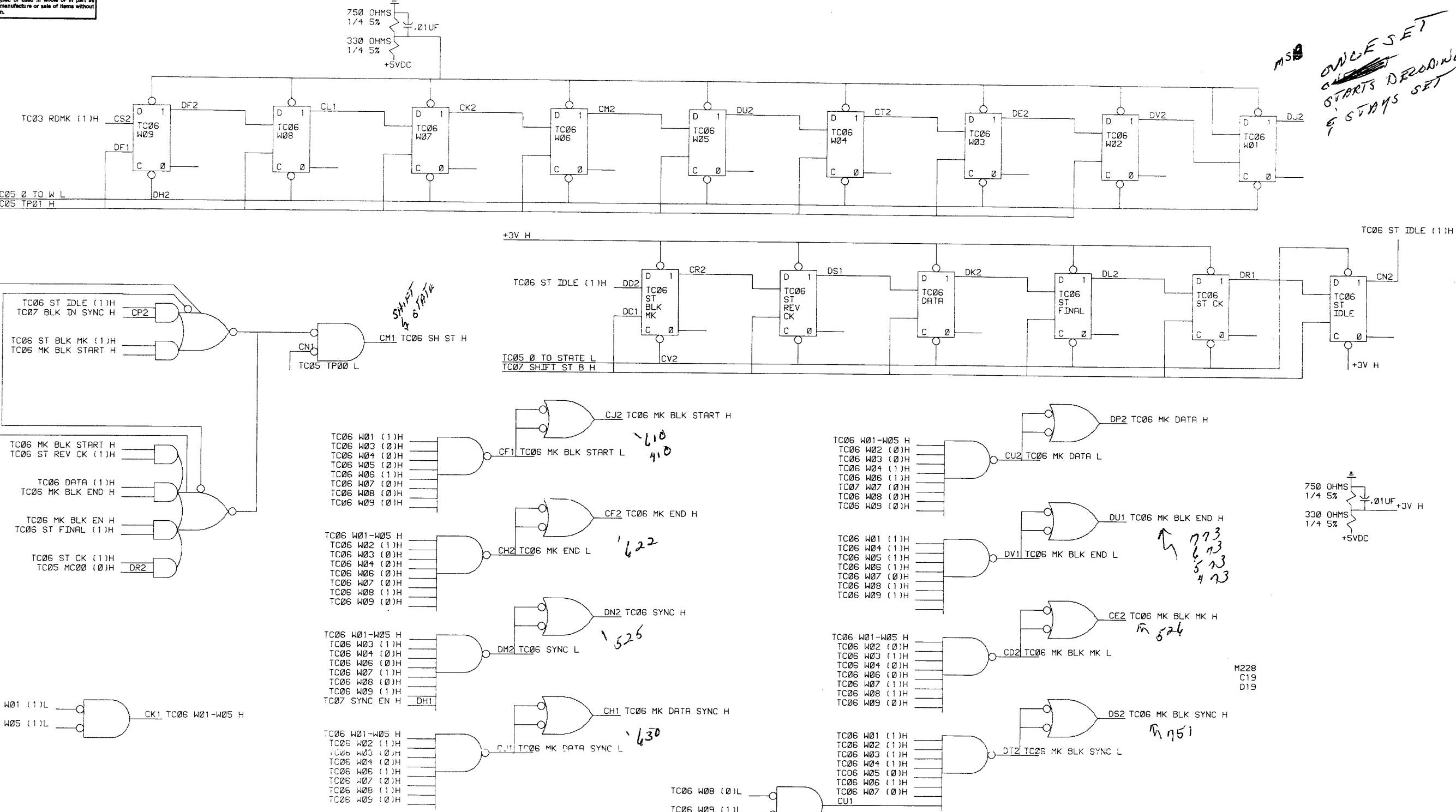






8 7 6 5 4 3 2 1

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CHKD: 7-16-76	DATE: 7-16-76	MAYNARD, MASSACHUSETTS		
ENG: P. P. G.	DATE: 7-16-76	TITLE: MARK TRACK DECODE		
PROJ. ENG: 7-16-76	DATE: 7-16-76			
PROD: J. B. B.	DATE: 7-16-76			
FIRST USED ON: 7-16-76				
TC15	SIZE: D	CODE: BS	NUMBER: TC15-0-06	REV: 1
SCALE: 1 OF 1	SHEET: 1	DIST: 1	1 510 100	

A

D

C

B

18

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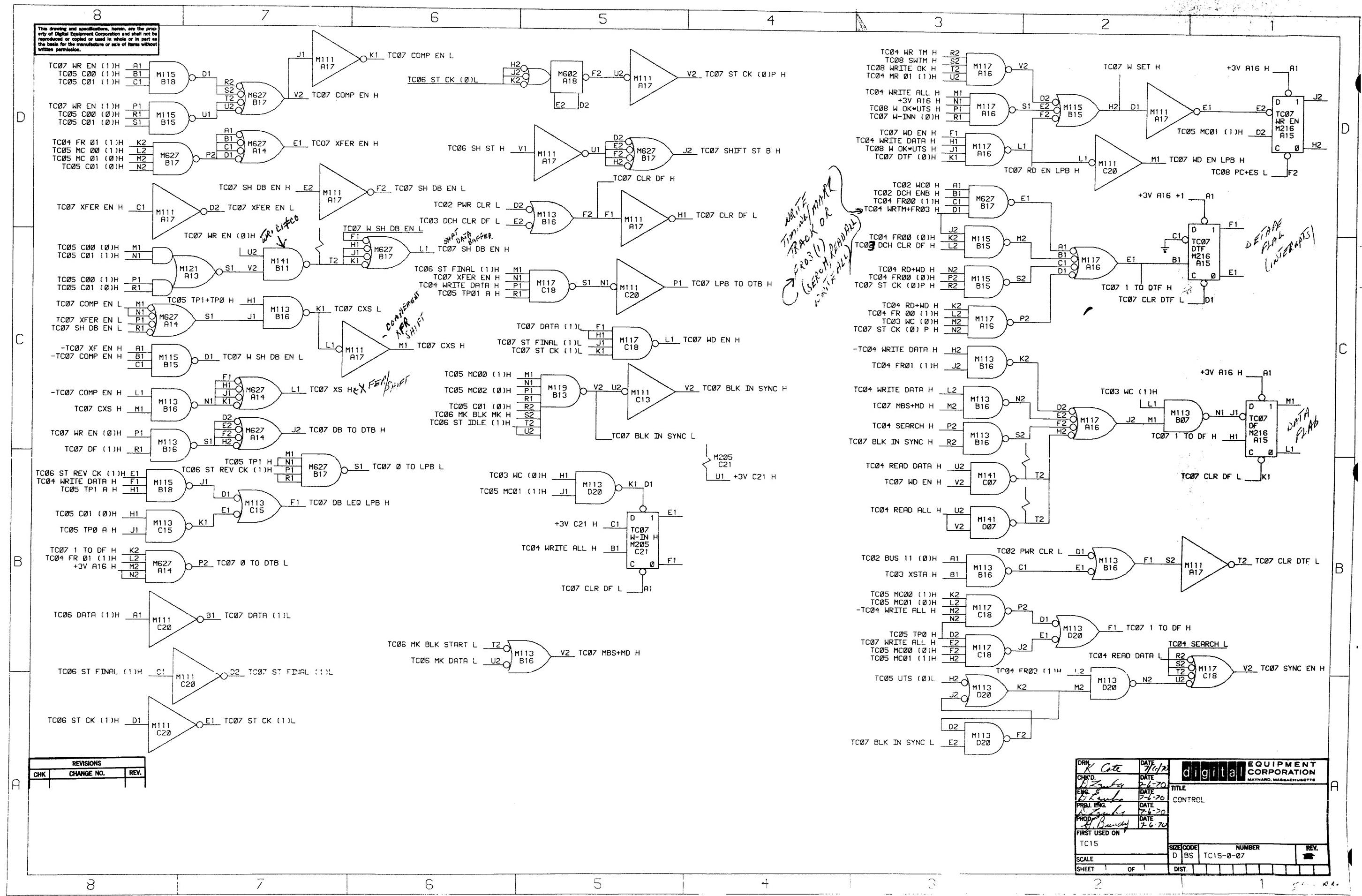
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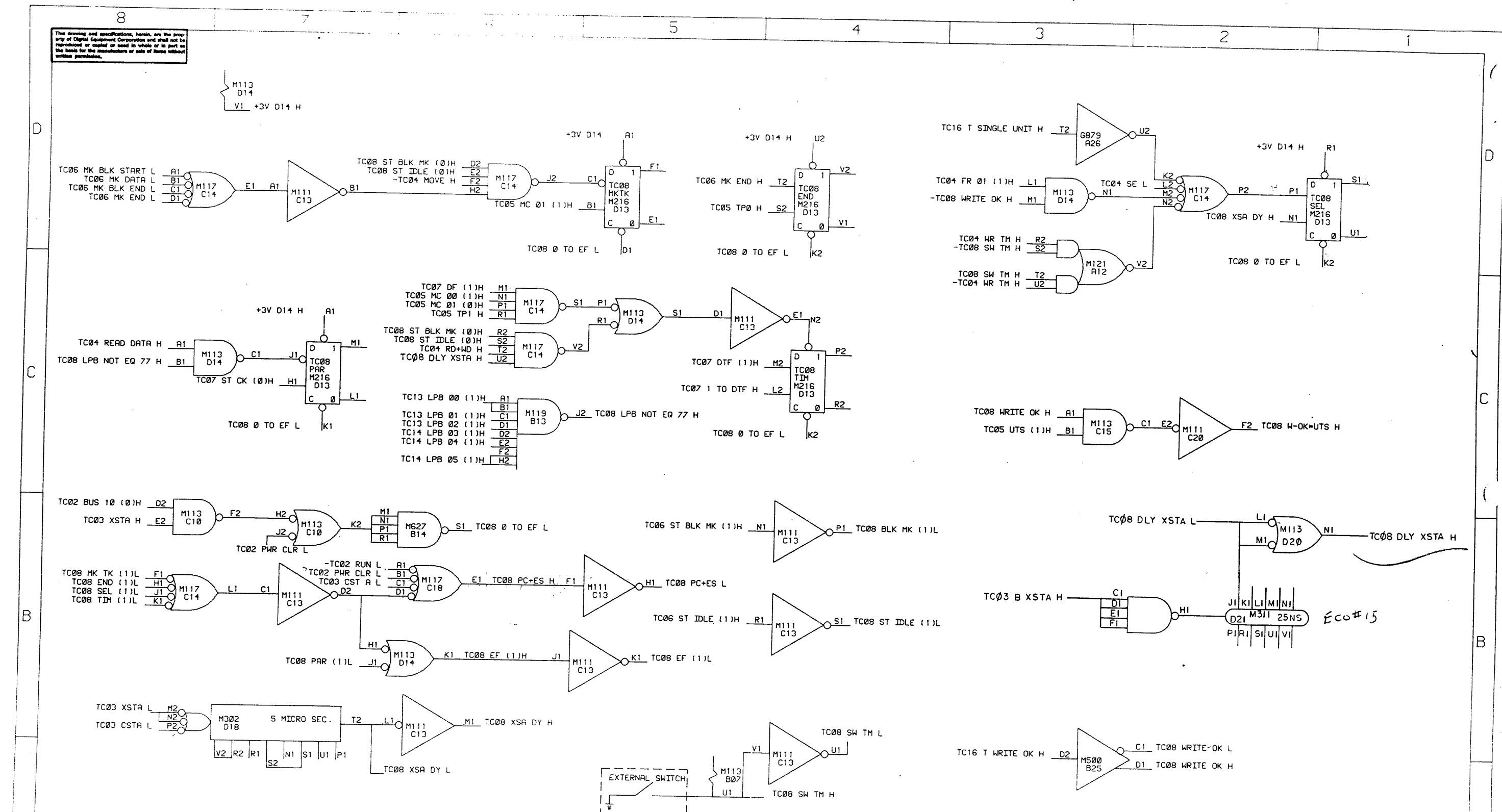
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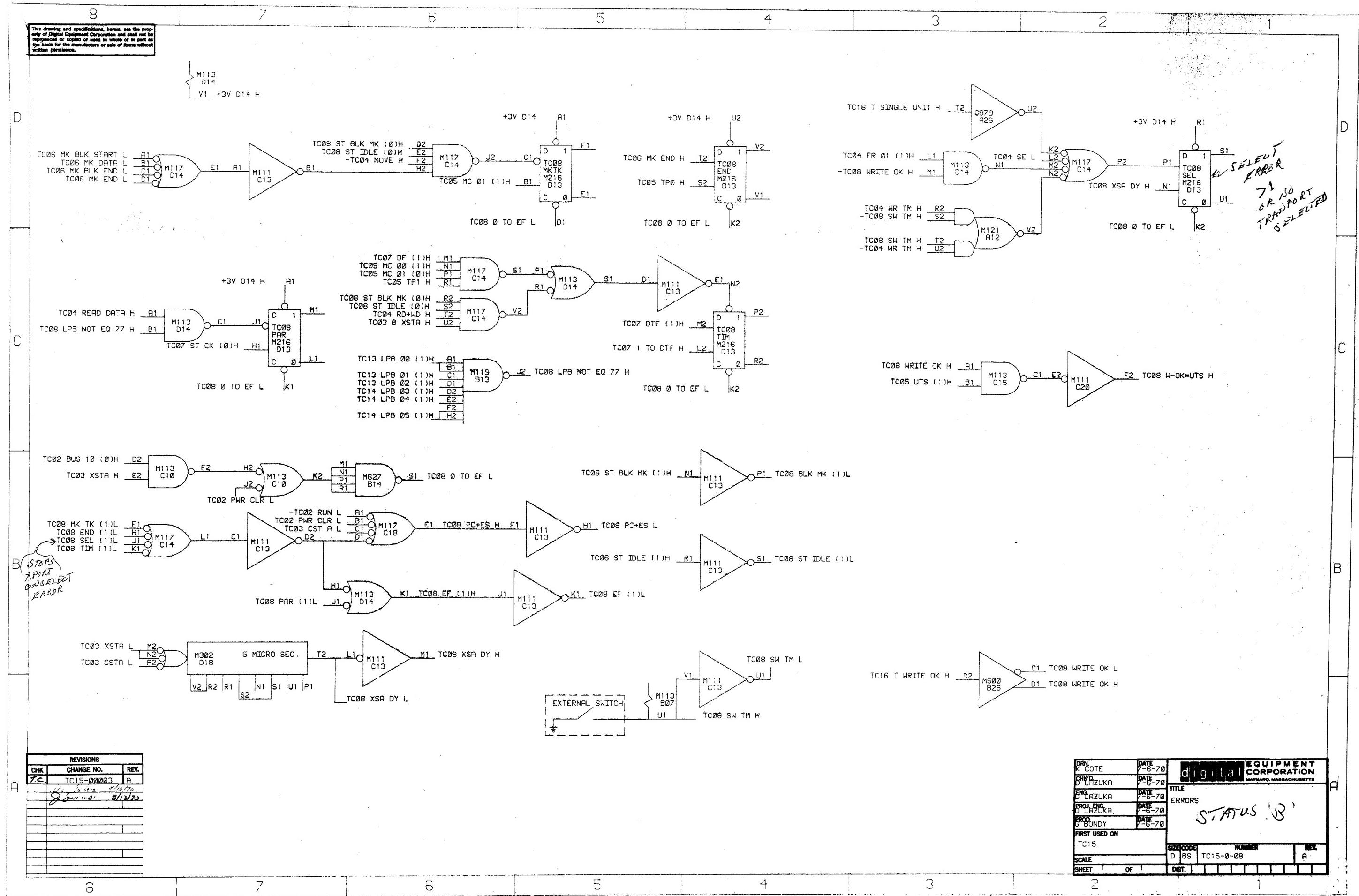
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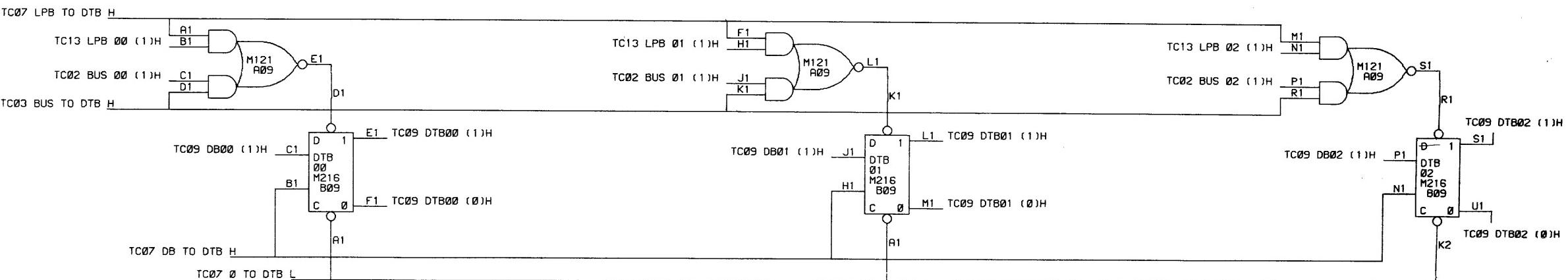
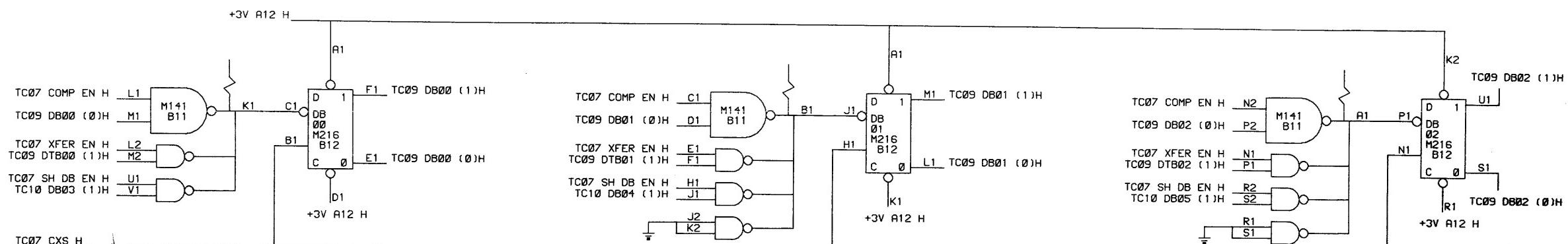
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PW	TC15-00015	B
FITZGERALD	TC15-00015	C
		2-13-73
		30

DRN K. COTE	DATE 7-6-70
CHK'D CHAZUKA	DATE 7-6-70
ENG CHAZUKA	DATE 7-6-70
PROJ. ENG. J. CHAZUKA	DATE 7-5-70
PROD. C. BAILY	DATE 7-6-70
FIRST USED ON 7-10-70	
SCALE 1:1	NUMBER TC15-0000
SHEET OF	REV. E
DIST.	



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DATA XFER



REVISIONS		
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CHK'D.	D. [Signature]	DATE	7-6-71
ENG.	M. [Signature]	DATE	7-6-71
PROJ. ENG.	D. [Signature]	DATE	7-6-71
PROD.	V. [Signature]	DATE	7-6-71
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SHEET	1	OF	1
DIST.			

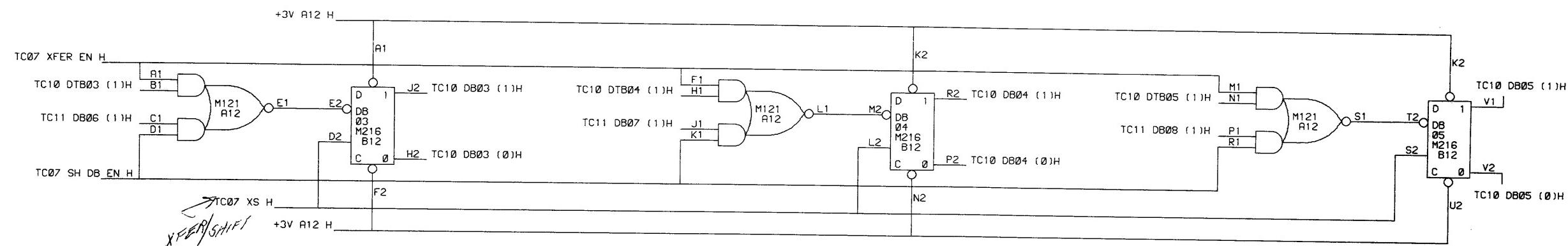
EQUIPMENT CORPORATION
digital
MAYNARD, MASSACHUSETTS

TITLE
DB00-02 DTB00-02

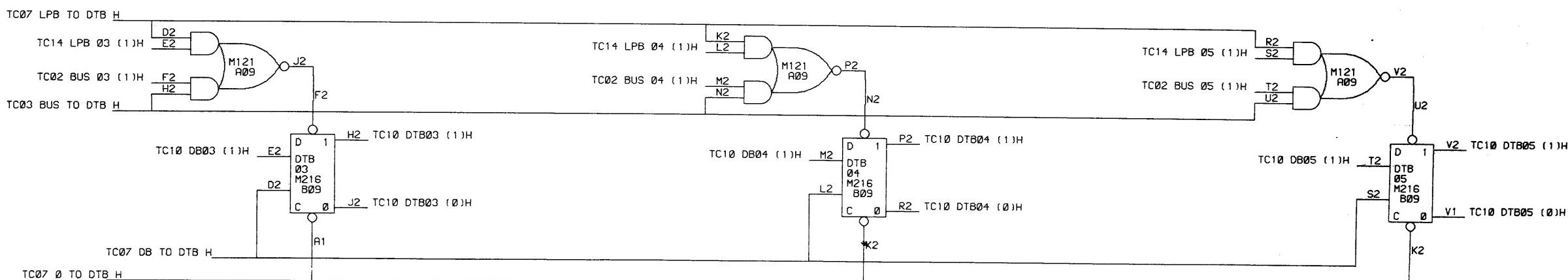
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M121
A12
V1 +3V A12 H

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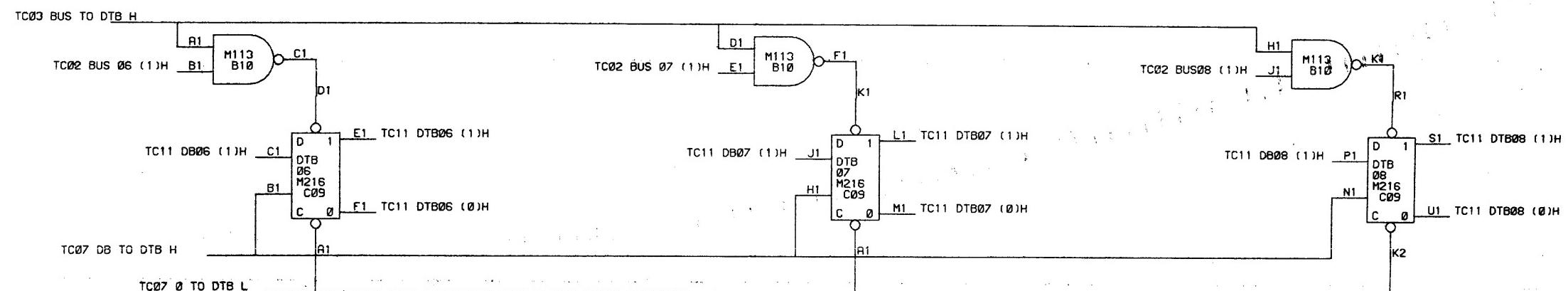
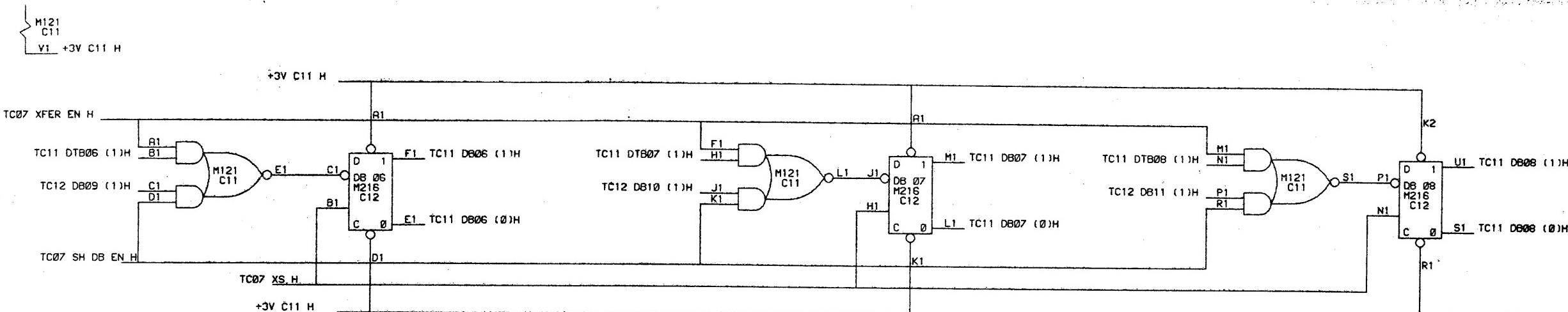
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REVISIONS		
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CWK'D: <i>John</i>	DATE: 7/6/70	
ENG: <i>John</i>	DATE: 7/6/70	
FREQ. ENG: <i>John</i>	DATE: 7/6/70	
PROG. BUNDY	DATE: 7/6/70	
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DIST:	REV.:	

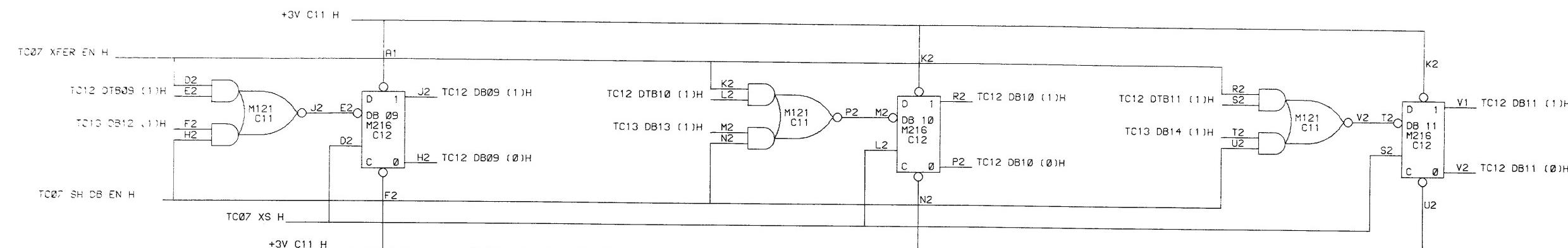
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REVISIONS		
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DRN. <i>R. Cote</i>	DATE 7-6-70	EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK'D. <i>L. G. L.</i>	DATE 7-6-70	TITLE	
ENG. <i>Alvarez</i>	DATE 7-6-70	DB 6-8 DTB 6-8	
PROJ. ENG. <i>A. Alvarez</i>	DATE 7-6-70		
PROD. <i>A. Buncy</i>	DATE 7-6-70		
FIRST USED ON TC15		SIZE CODE D BS	NUMBER TC15-0-11
SCALE		DIST.	
SHEET 1	OF 1		

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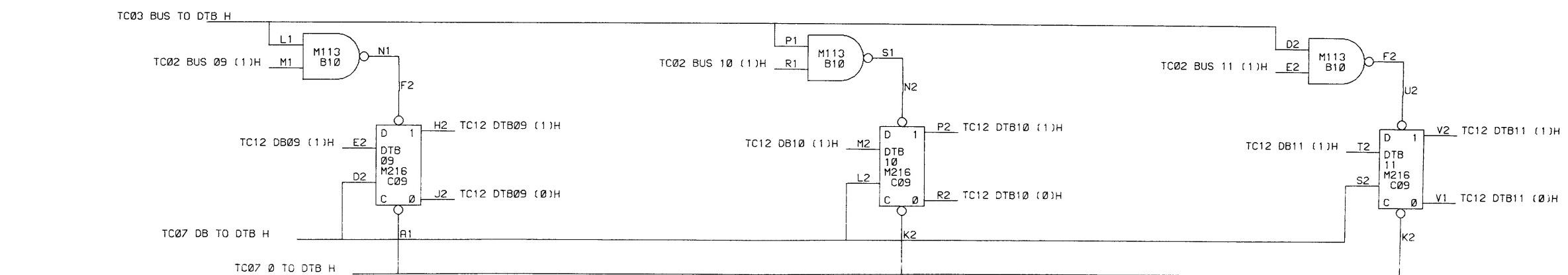


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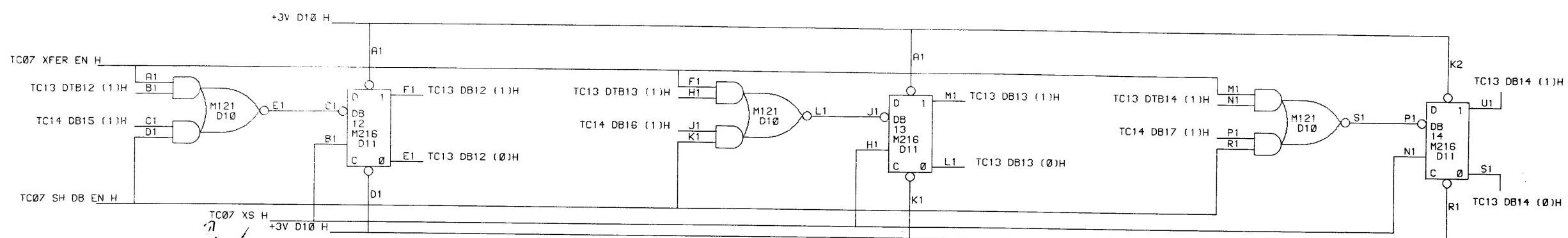
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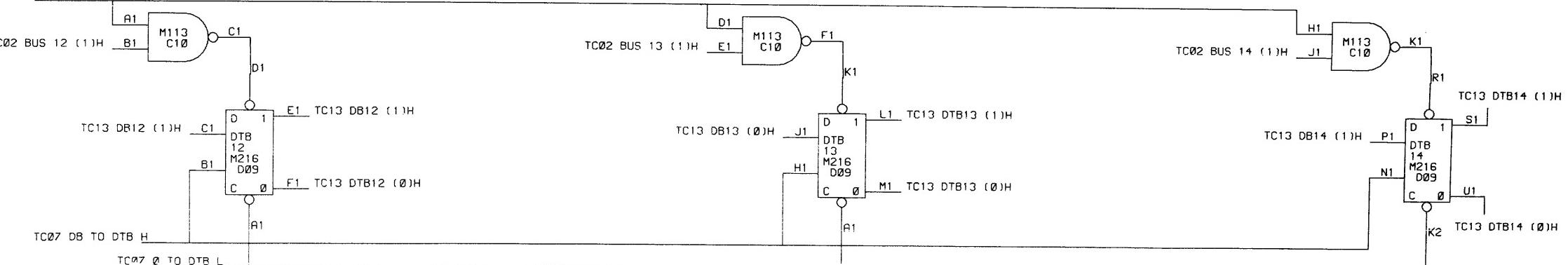
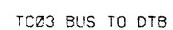
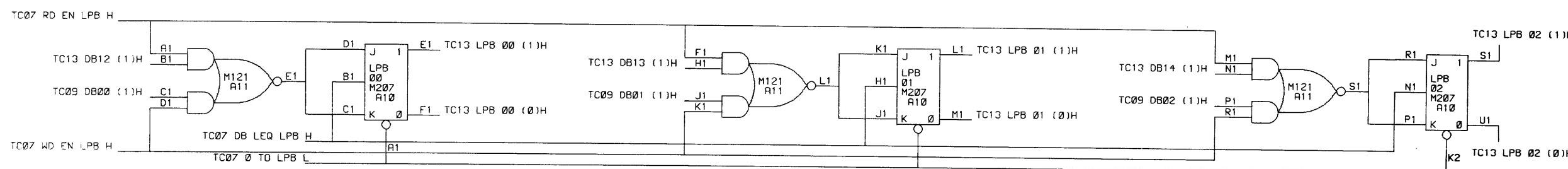


REVISIONS		
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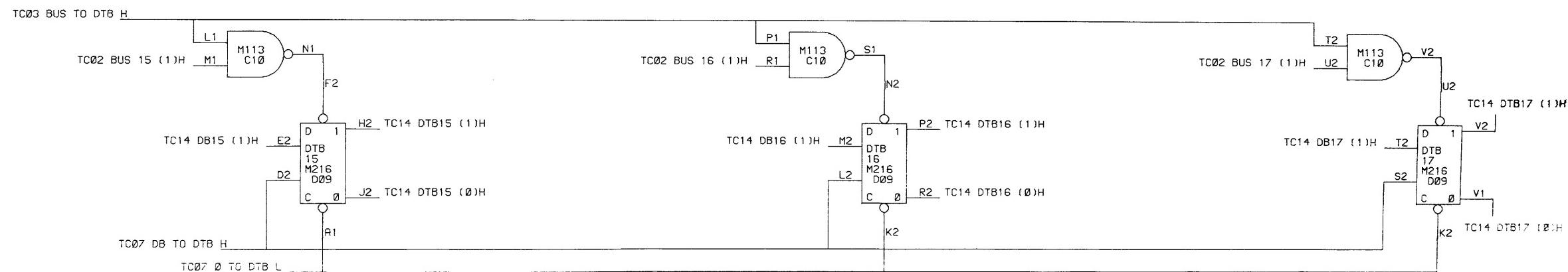
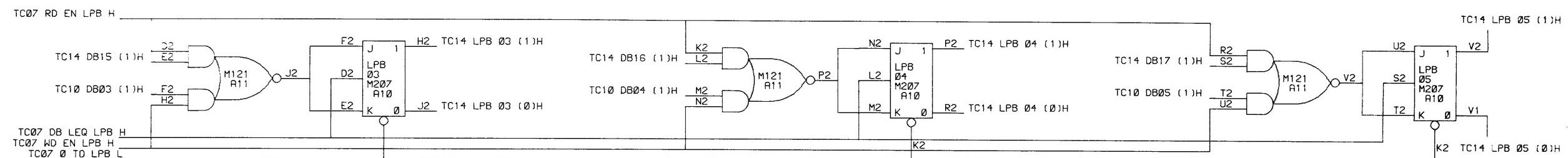
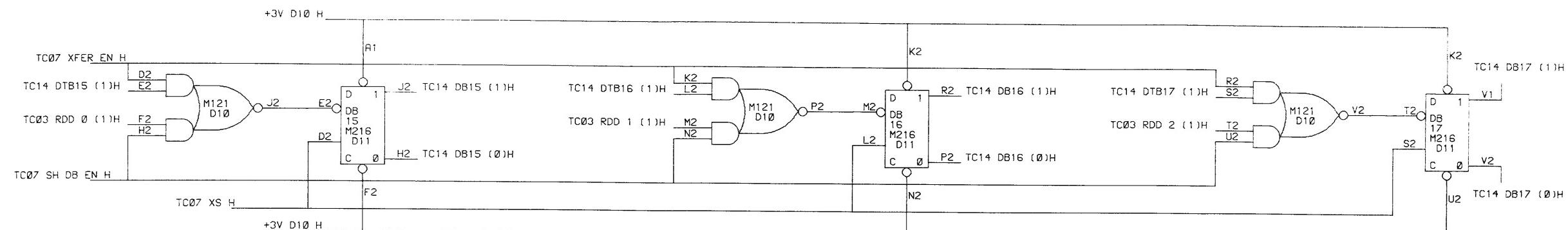


REVISIONS		
CHK	CHANGE NO.	REV.

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CHK'D. <i>1-26-70</i>	DATE <i>7-6-70</i>	TITLE	
ENG. <i>ATL-1-1</i>	DATE <i>7-6-70</i>	DB 12-14 DTB 12-14	
PUBJ. ENG. <i>1-26-70</i>	DATE <i>7-6-70</i>		
PROD. <i>A Buncay</i>	DATE <i>7-6-70</i>		
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TC15	SIZE D	CODE BS	NUMBER TC15-0-13
SCALE	REV.		
SHEET 1	OF 1	DIST.	

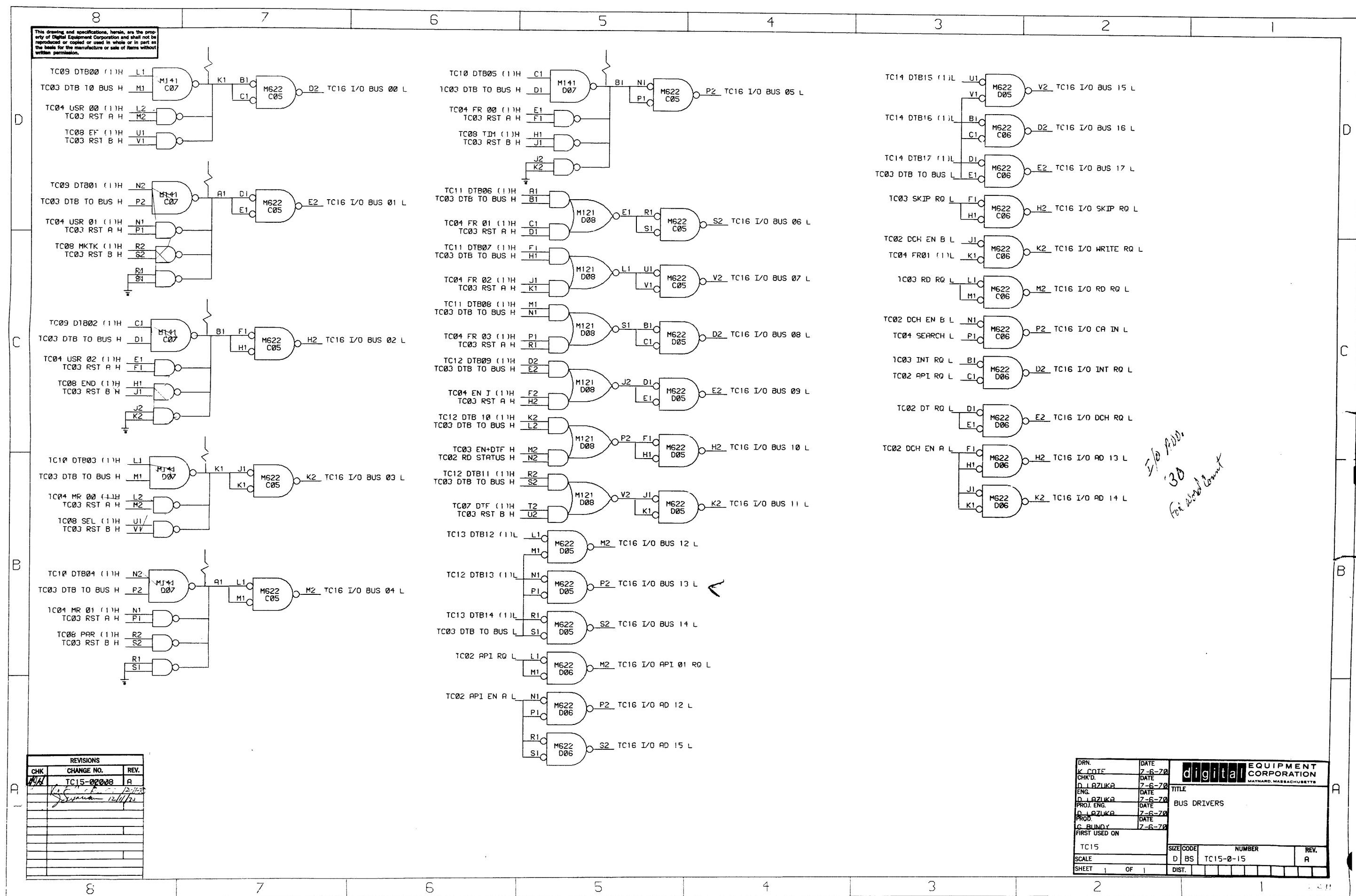
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M121
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V1 +3V D10 H

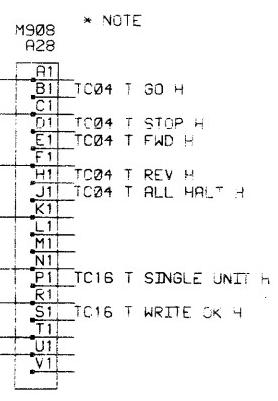
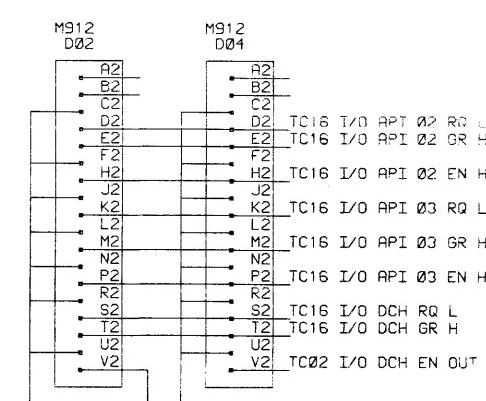
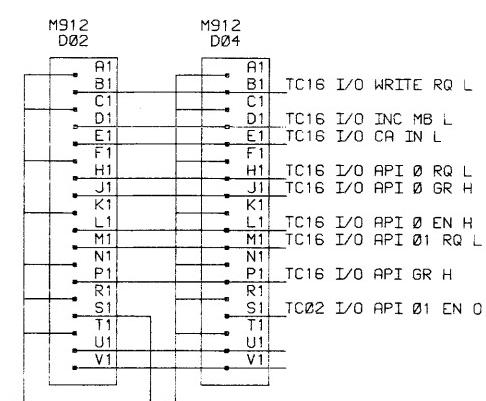
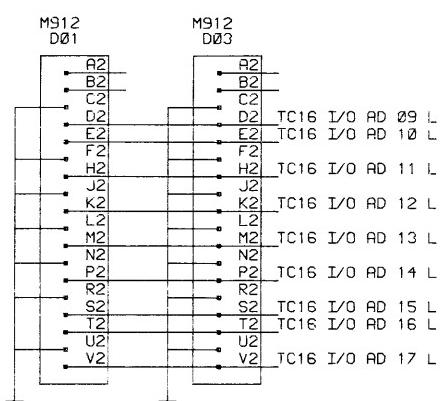
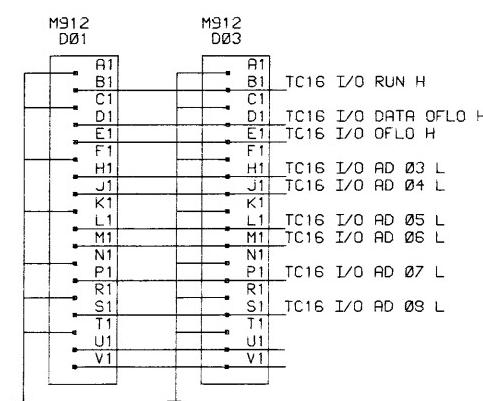
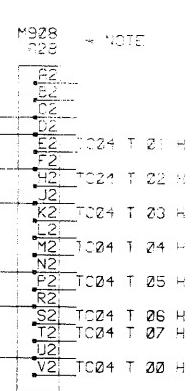
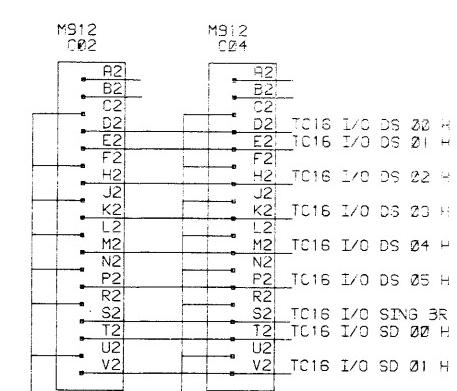
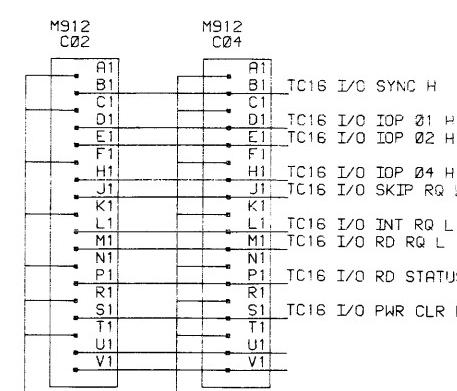
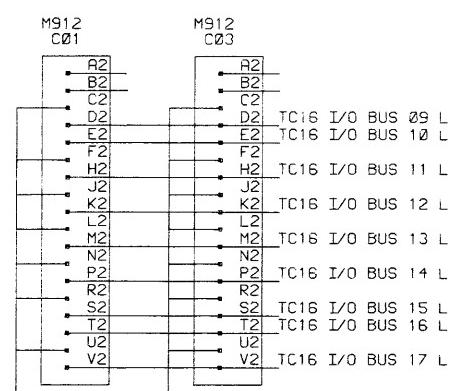
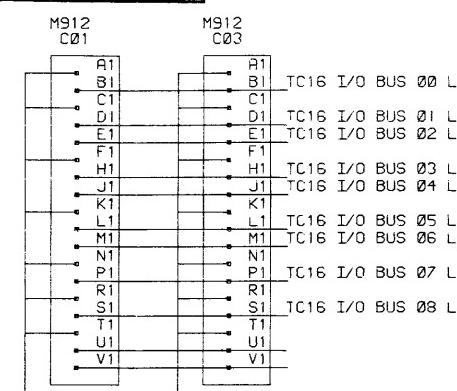


REVISIONS		
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ENG.	DATE	
PROJ. ENG. A. Agius	DATE 7-6-70	
PROD. J. Duncy	DATE 7-6-70	
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TC15		
SHEET 1 OF 1	SIZE CODE D 6S	NUMBER TC15-0-14
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	DIST.	



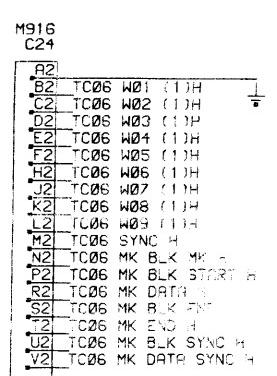
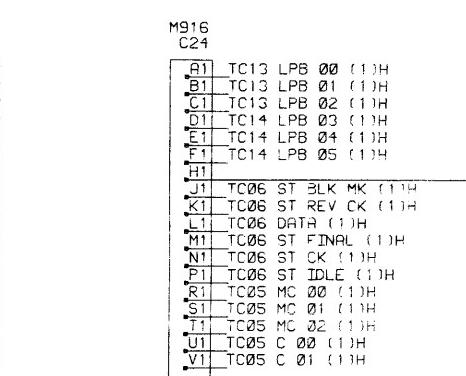
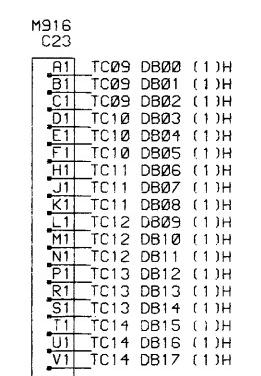
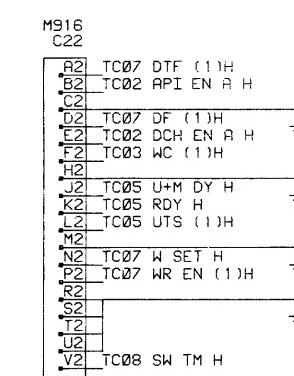
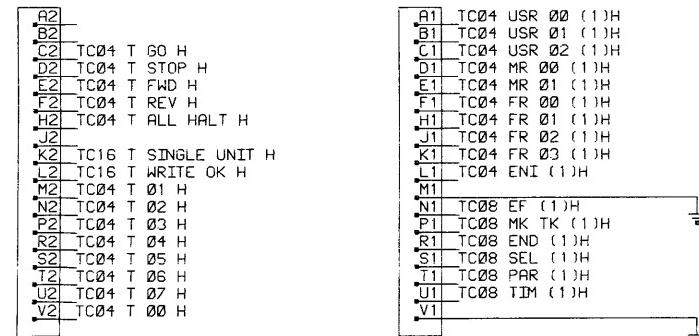
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TC16 I/O API 01 EN IN H

TC16 T/Q DCH FN TN H

W023 ** NOTE
A27

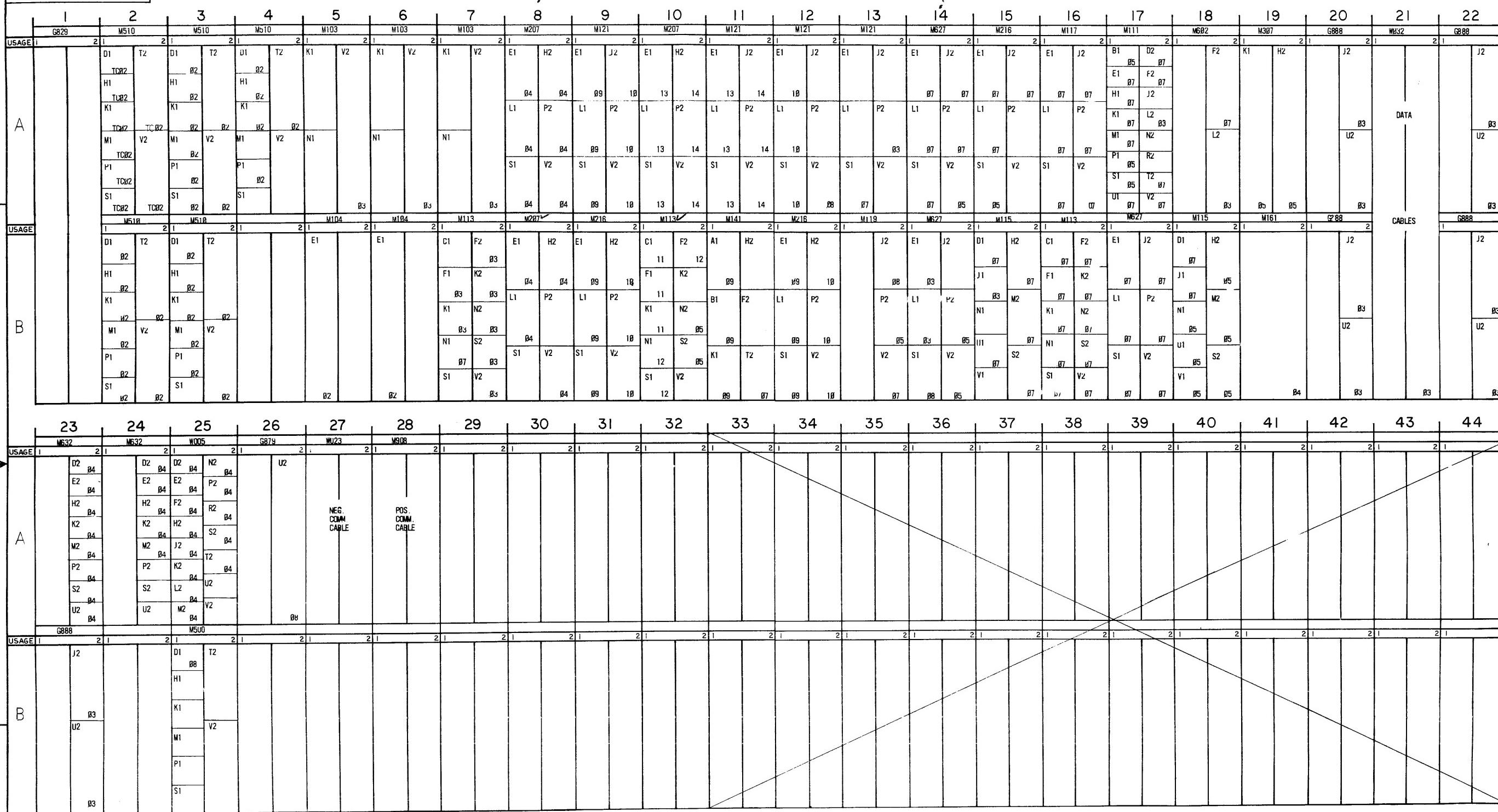


* TU56 ONLY
** TU55 ONLY

REVISIONS		
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	N LEGERE 10-9-70	
	J SWANSON 10-9-70	
<i>J. H. K.</i>	TC15-00008	B
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	<i>J. Swanson</i>	<i>11/17/73</i>

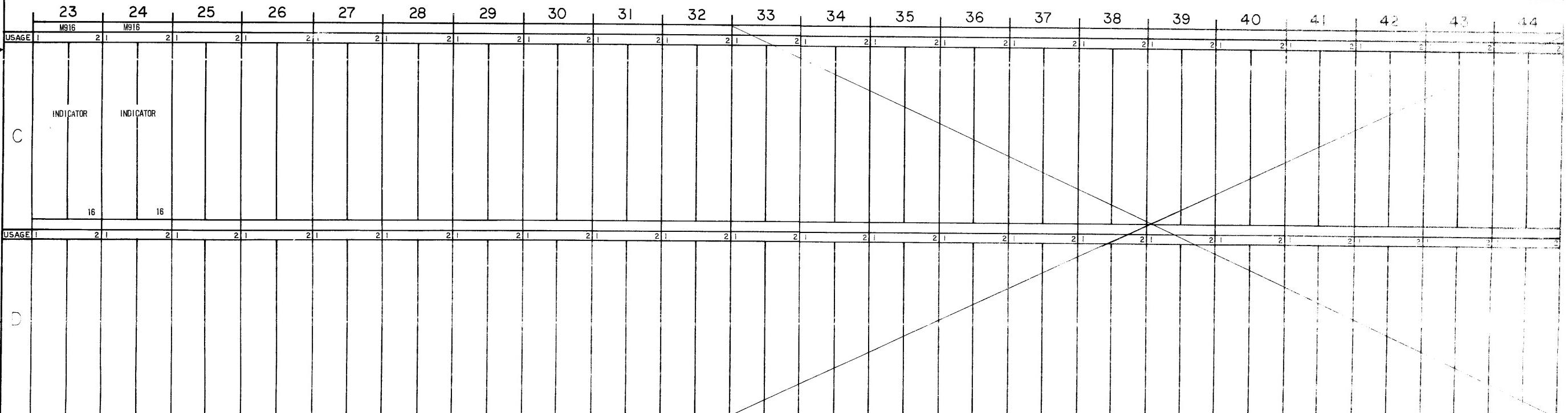
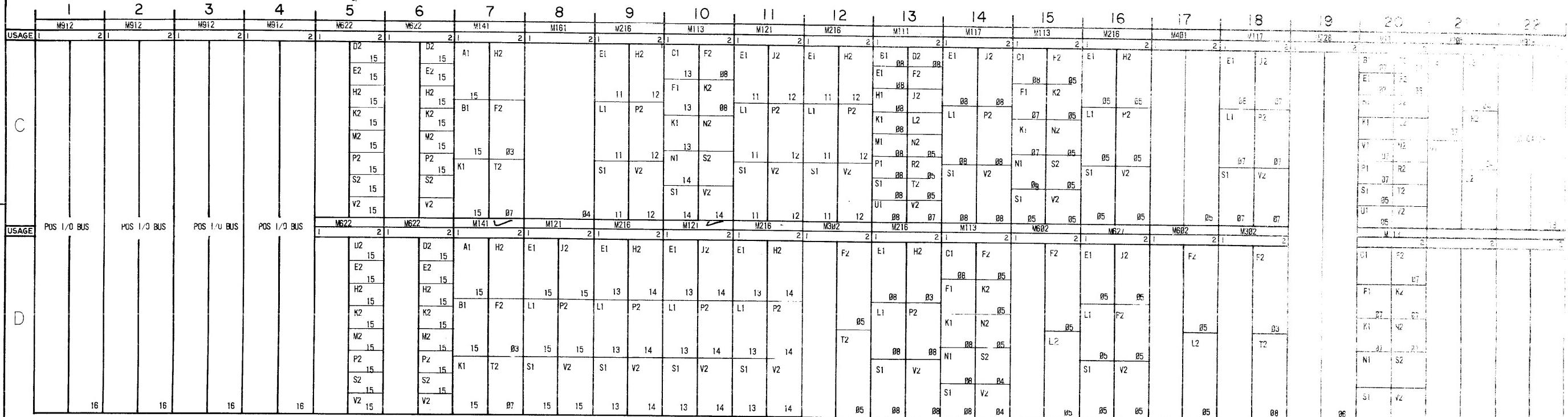
DRN: K COTE	DATE 7/6/70	EQUIPMENT CORPORATION <small>MAYNARD MASSACHUSETTS</small>			
CHK'D: D LAZUKA	DATE 7/6/60	digital			
ENG: D LAZUKA	DATE 7/6/70	TITLE			
PROJ. ENG. D LAZUKA	DATE 7/6/70	CABLES			
PROD: G BUNDY	DATE 7/6/70				
FIRST USED ON					
TC15		SIZE D	CODE BS	NUMBER TC15-0-16	REV. B
SCALE		DIST.			
SHEET 1	OF 1				

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FIRST USED ON OPTION/MODEL TC15		DO NOT SCALE DRAWING		EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES		DRN. C.C.T.E. DATE 7-6-70		TITLE	
TOLERANCES DECIMALS FRACTIONAL ANGLES = .005 1/64 = 0°30'		CHK'D. D. LAZUKA DATE 7-6-70			
FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS		ENG. D. LAZUKA DATE 7-6-70			
MATERIAL		PROJ. ENG. D. LAZUKA DATE 7-6-70			
FINISH		PROD. D. LAZUKA DATE 7-6-70			
NEXT HIGHER ASSY A-ML-TC15-0		TITLE			
SIZE CODE D MU TC15-0-17		NUMBER			
SCALE NONE		REV. C			
SHEET 1 OF 2		DIST.			

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FIRST USED ON OPTION/MODEL		DO NOT SCALE DRAWING		EQUIPMENT CORPORATION	
TC15		UNLESS OTHERWISE SPECIFIED		REV. C	
		DIMENSION IN INCHES		DATE 04-15-73	
		TOLERANCES		TITLE	
		DECIMALS FRACTIONS ANGLES		ENG. DATE	
		± .005 ± .164 ± .030		PROJ. ENG. DATE	
		FINAL SURFACE QUALITY ✓ REMOVE BURRS AND BREAK SHARP CORNERS		DESIGNER DATE	
		MATERIAL		PPGD DATE	
		NEXT HIGHER ASSY		CRAFTSMAN DATE	
		FINISH		SCALE	
		A-11-TC15-C		SHEET 2 OF 2	
REVISIONS	CHANGE NO.	DIST. 1		REV. C	
CHK					

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MODULE UTILIZATION

SIZE CODE NUMBER D M U T C 15 - Ø - 17 REV. C

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